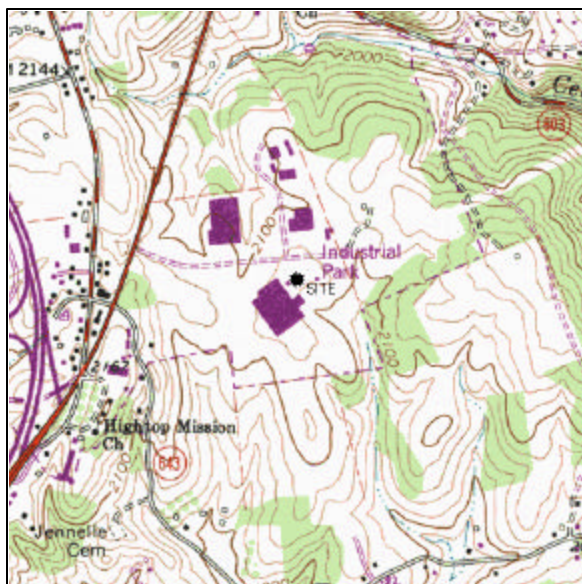


Region 3 GPRA 2005 Baseline RCRA Corrective Action Facility **FEDERAL-MOGUL CORPORATION**

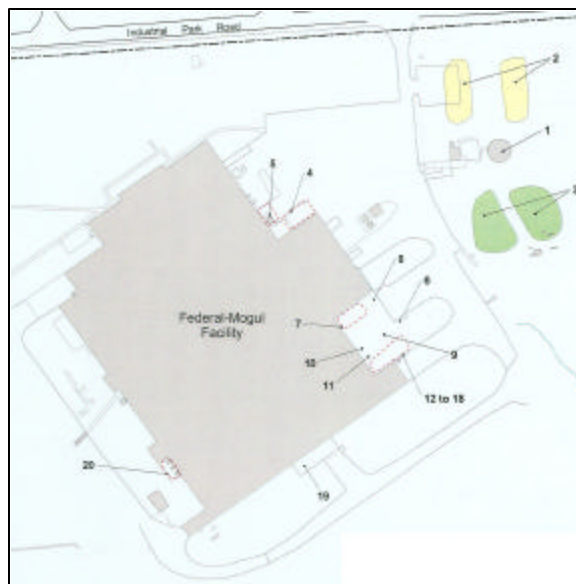
300 Industrial Park Road, SE
Blacksburg, VA 24060
Congressional District 9
EPA ID No.: VAD054039961
Last Updated: January 4, 2008

Topographic Site Map



Blacksburg, VA USGS Quadrangle (1965, Photorevised 1983),
Scale: 1 inch = 1,700 feet (approx.)

Partial Site Map



Scale: 1 inch = 500 feet (approx.)

Current RCRA CA Activities

The Virginia Department of Environmental Quality (DEQ) is the lead agency for oversight of Corrective Action (CA) work at the facility under the Resource Conservation and Recovery Act (RCRA). The CA investigations and any necessary clean up activities at the facility are being implemented in accordance with the conditions and requirements of a Hazardous Waste Management Post-Closure Permit and a Hazardous Waste Corrective Action Permit.

The Hazardous Waste Management Post-Closure Permit (Permit) was initially issued to the facility with an effective date of September 29, 1994, for several former surface impoundments, which were closed as a hazardous waste landfill with wastes closed in place; the above Post-Closure Permit expiration date was September 29, 2004.

The DEQ reissued the facility's Hazardous Waste Management Post-Closure Permit with an effective date of February 8, 2006; the current Post-Closure Permit expiration date is February 8,

2016. The above Post-Closure Permit includes a Base Corrective Action Program that constitutes only the initial phase of the complete corrective action program.

A Hazardous Waste Corrective Action Permit was issued to the facility by the DEQ with an effective date of April 17, 2001; the above CA Permit has an expiration date of April 17, 2011. The purpose of the CA Permit is to implement CA requirements specified under the Hazardous and Solid Waste Amendments (HSWA) of the RCRA of 1984.

Site Description

Federal-Mogul Corporation (Federal-Mogul) is located on approximately 58 acres of land approximately three miles southeast of the Town of Blacksburg, Montgomery County, Virginia. Cedar Run is located approximately 1/2 mile north of the facility.

The facility produces precision, high specification engine crankshaft and piston rod bearings for the automotive and industrial engine industries. Historically, the manufacturing process involved electroplating components. Copper, tin, zinc, and lead were plated and chromic acid etching was performed at the facility. Cyanide was also used in the electroplating process. Trichloroethylene (TCE) was used by Federal-Mogul as a solvent to remove grease from metal parts.

Two sedimentation ponds, while in operation, received wastewater from the electroplating process. In these sedimentation ponds, metal hydroxide sludge was precipitated. The hazardous sludge was pumped from the sedimentation ponds into one of the two sludge drying beds for dewatering and disposal. Wastewater from the sedimentation ponds was discharged into Cedar Run under the authority of a Virginia Pollution Discharge Elimination System (VPDES) permit.

The two sedimentation ponds and two sludge drying beds, all classified as S04 surface impoundments, were clean closed for soils in 1983 and are monitored as a single waste management unit (SWMU) with respect to groundwater monitoring and CA requirements specified in the Post-Closure Permit and subsequently issued a CA Permit. The combined area of the SWMU is approximately 3/4 of an acre.

RCRA CA Milestones

To date, the following Resource Conservation and Recovery Act (RCRA) Corrective Action (CA) milestones have been completed at this facility:

- On September 29, 1994, the original Hazardous Waste Management Post-Closure Permit became effective until September 29, 2004.
- On August 21, 1998, the groundwater recovery and treatment system was started. The treatment system, consisting of an air stripper and carbon filtration units, treats TCE-impacted groundwater removed from three on-site extraction wells.
- On January 20, 1999, the RCRA Facility Assessment (RFA) was completed.

- On February 2, 1999, the facility was ranked as a “high” priority site according to the National Corrective Action Prioritization Schedule (NCAPS).
- On April 17, 2001, the Hazardous and Solid Waste Amendments (HWSA) CA Permit became effective; the CA has an expiration date of April 17, 2011.
- On June 13, 2003, the RCRA Facility Investigation (RFI) Workplan, Revision 1 was approved by the DEQ.
- On March 26, 2004, the draft RFI Report was submitted to the DEQ.
- On May 27, 2004, the Hazardous Waste Management Post-Closure Permit renewal application was submitted to the DEQ.
- On February 18, 2005, the Permit modification involving the changes in frequency of groundwater monitoring and the constituent monitoring list was approved by the DEQ.
- On February 8, 2006, the Hazardous Waste Management Post-Closure Permit renewal became effective; the Post-Closure Permit expiration date is February 8, 2016.
- On June 8, 2006, the RFI Report was accepted and a Corrective Measures Study (CMS) Plan was requested.
- On September 29, 2006, a Corrective Measures Study Plan was approved by the DEQ.
- On November 13-16, 2006, extraction wells and piezometers were installed for the Soil Vapor Extraction (SVE) Pilot Test. One shallow extraction well (20.5 ft depth) and one deep extraction well (39 ft depth) were installed. Three piezometer nests (shallow/deep) were installed at 10, 20, and 30 ft distances from the extraction wells.
- Nine additional direct push soil borings were completed at the site to collect supplemental physical and chemical soil data for the CMS. Twenty-five soil samples were submitted for chemical analysis of tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride. Select undisturbed samples were submitted for testing of physical parameters including: total organic content, grain size, moisture content, soil porosity, soil particle density, pH, and hydraulic conductivity.
- On December 12-13, 2006, a pilot test study was conducted for the CMS.
- A Corrective Measures Study Plan, dated May 2007, was submitted to the DEQ proposing an Interim Measure for a source area that is likely a significant contributor to TCE impacted groundwater.
- On December 6, 2007 the DEQ responded to the CMS with a Notice of Deficiency (NOD) letter requesting the submittal of additional information related to the

groundwater contamination. However, the soil vapor extraction (SVE) Interim Measure proposed for the remediation of the subsoils in the vadose zone of the source area was conceptually approved and an SVE Work Plan was requested to be submitted to the DEQ.

Details and supporting documentation regarding the above can be obtained by reviewing files at the DEQ's Central Office or by contacting the project managers identified in this fact sheet.

Environmental Indicator Status

Under the Government Performance and Results Act (GPRA), the Environmental Protection Agency (EPA) set national goals to address high priority RCRA CA facilities by the year 2008. EPA evaluates two key indicators for each facility: *Current Human Exposures Under Control* and *Migration of Contaminated Groundwater Under Control*. This facility is one of EPA Region 3's high priority facilities and falls under the GPRA initiative.

Virginia's current evaluation of Environmental Indicators for this facility is as follows:

- *Human Exposures Controlled Determination:* The DEQ has made the EI determination of "yes, that current human exposures are under control." The above determination is based upon the DEQ's Current Human Health Environmental Indicator (HHEI) Determination Report, CA725, dated September 2003. This above HHEI determination is considered current, effective January 4, 2008.
- *Release to Groundwater Controlled Determination:* The DEQ has made the EI determination of "yes, that migration of contaminated groundwater is under control," based upon the review of CA information for the CCP site contained in the EI determination Report, CA750, dated September 2003. The above EI determination indicates that the migration of "contaminated" groundwater is believed to be under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the "existing area of contaminated groundwater." This EI determination is considered current, effective January 4, 2008.

Contaminants

The primary constituent of concern is TCE. Additional constituents of concern in the soil and groundwater include cadmium, chromium, copper, cyanides, lead, nickel, tin, and zinc.

Institutional Controls

Federal-Mogul constructed potable water lines to deliver city drinking water to residents along Jennelle Road, located south of the facility, whose water wells were impacted by the facility's groundwater plume. The potable water lines were extended to provide city drinking water to other nearby non-impacted residences as an added safety measure.

A Hazardous Waste Management Post-Closure Permit (initially issued to the facility by the DEQ in 1994) was reissued with an effective date of February 8, 2006; the Post-Closure Permit expires on February 8, 2016.

A Hazardous Waste Corrective Action Permit (Permit) was issued to the facility by the DEQ with an effective date of April 17, 2001; the above CA Permit has an expiration date of April 17, 2011. The purpose of the CA Permit is to implement CA requirements specified under the Hazardous and Solid Waste Amendments (HSWA) of the RCRA of 1984.

The above Permits require post-closure care, groundwater monitoring, and facility-wide CA. The CA investigations and any necessary clean up activities at the facility are being implemented in accordance with the conditions and requirements of the above Permits.

A Deed Notice is in place identifying the location of the former surface impoundments closed with waste in place as a hazardous waste landfill.

Community Involvement

A copy of all documents relating to the RCRA CA program at this facility are available for viewing at DEQ's Central Office located at 629 East Main Street in Richmond, Virginia. Additionally, public review can be conducted at:

Montgomery-Floyd Regional Library
Blacksburg Branch
200 Miller Street
Blacksburg, VA 24060
Phone: (540) 552-8246

The documents may be reviewed during normal library hours, Monday-Thursday: 9:00 AM – 8:00 PM; Friday: 1:00 PM – 5:00 PM; and Saturday: 9:00 AM – 5:00 PM. For more information about the library's operations, please visit the library's website at: http://www.montgomery-floyd.lib.va.us/hours_location.php?lib_id=1

Government Contacts

The Commonwealth of Virginia has the lead authority for this project. Please contact the DEQ project manager listed below for details on this project or the contents of this fact sheet.

DEQ Project Manager

Erich Weissbart
Virginia Department of Environmental Quality
629 East Main Street
P.O. Box 1105
Richmond, VA 23218
Phone: (804) 698-4393
Email: ejweissbart@deq.virginia.gov

EPA Project Manager

Mr. Mike Jacobi – 3WC23
USEPA - Region 3
1650 Arch Street
Philadelphia, PA 19103-2029
Phone: (215) 814-3435
Email: jacobi.mike@epa.gov

For more information about EPA's CA program, including Environmental Indicators, please visit EPA's website at: www.epa.gov/reg3wcmd/correctiveaction.htm

Facility Contact

The facility contact, as listed in the RCRA Permit, is:

Mr. Jeff Pack, CHMM
Environmental Health and Safety Coordinator
Federal-Mogul Corporation
300 Industrial Park Road, SE
Blacksburg, VA 24060
Phone: (540) 557-3344
Email: Jeff.Pack@federalmogul.com

Fact Sheet Update

The previous fact sheet was updated July 2007. The next fact sheet update is scheduled for July 2008. Previous fact sheets may be obtained through the listed DEQ contact.